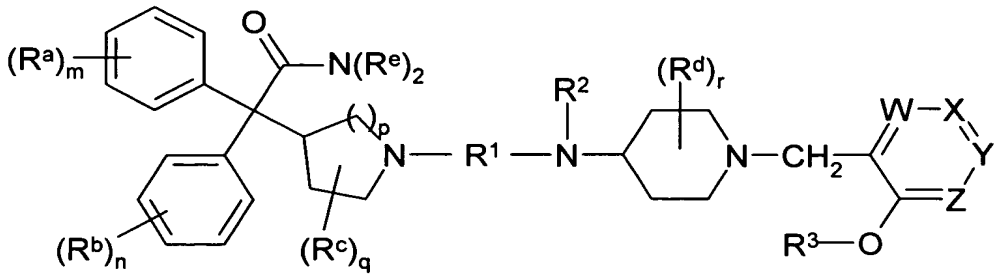
WHAT IS CLAIMED IS:

1. A compound of formula I:



I

wherein

W, *X*, *Y* and *Z* are independently selected from the group consisting of CH, CR^4, N and N→O; provided that at least one and no more than two of *W*, *X*, *Y* and *Z* are N or N→O;

R^1 is a group of formula (a):

$$—(CH_2)_a—(O)_b—(CH_2)_c—\quad (a)$$

wherein each $-CH_2-$ group in formula (a) and the $-CH_2-$ group between the piperidine nitrogen atom and the ring containing *W*, *X*, *Y* and *Z* in formula I is optionally substituted with 1 or 2 substituents independently selected from the group consisting of C_{1-2} alkyl and fluoro; wherein each alkyl group is optionally substituted with 1 to 3 fluoro substituents;

R^2 is selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^5$ and $-(CH_2)_x-R^6$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents;

each R^3 is independently selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^7$ and $-(CH_2)_y-R^8$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^4 is independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-OR^3$ and halo; or two adjacent R^4 groups are joined

to form C_{3-6} alkylene, -O-(C_{2-4} alkylene)-, -O-(C_{1-4} alkylene)-O-, -(O)C-CH=CH- or -CH=CH-C(O)-; or when Z is CR^4, $-OR^3$ and R^4 are joined to form -O-(C_{2-5} alkylene)- or -O-(C_{1-5} alkylene)-O-; wherein each alkyl, alkylene, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^5 and R^7 is independently selected from the group consisting of C_{3-5} cycloalkyl, C_{6-10} aryl, -C(O)(C_{6-10} aryl), C_{2-9} heteroaryl, -C(O)(C_{2-9} heteroaryl) and C_{3-6} heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k and the aryl and heteroaryl groups are optionally further substituted with a phenyl group, where the phenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^6 and R^8 is independently selected from the group consisting of -OH, $-OR^9$, $-SR^9$, $-S(O)R^9$, $-S(O)_2R^9$, $-C(O)R^9$, C_{3-5} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl and C_{3-6} heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^9 is independently selected from the group consisting of C_{1-4} alkyl, C_{3-5} cycloalkyl, C_{6-10} aryl and C_{2-9} heteroaryl; wherein the alkyl and cycloalkyl groups are optionally substituted with 1 to 5 fluoro substituents; and the aryl and heteroaryl groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^a and R^b is independently selected from the group consisting of C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, C_{3-6} cycloalkyl, cyano, halo, $-OR^f$, $-SR^f$, $-S(O)R^f$, $-S(O)_2R^f$ and $-NR^gR^h$; or two adjacent R^a groups or two adjacent R^b groups are joined to form C_{3-6} alkylene, -(C_{2-4} alkylene)-O- or -O-(C_{1-4} alkylene)-O-; wherein each alkyl, alkylene, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^c and R^d is independently selected from the group consisting of C_{1-4} alkyl and fluoro; wherein each alkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^e is independently selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl, C_{3-6} heterocyclic, $-CH_2-R^i$ and $-CH_2CH_2-R^j$; or both R^e groups are joined together with the nitrogen atom

to which they are attached to form C_{3-6} heterocyclic; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents; and each aryl, heteroaryl and heterocyclic group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^f is independently selected from the group consisting hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^g and R^h is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; or R^g and R^h are joined together with the nitrogen atom to which they are attached to form C_{3-6} heterocyclic; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents, and the heterocyclic group is optionally substituted with 1 to 3 substitutents independently selected from C_{1-4} alkyl and fluoro;

each R^i is independently selected from the group consisting of C_{3-6} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl and C_{3-6} heterocyclic; wherein aryl, cycloalkyl, heteroaryl and heterocyclic group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^j is independently selected from the group consisting of C_{3-6} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl, C_{3-6} heterocyclic, -OH, $-O(C_{1-6}$ alkyl), $-O(C_{3-6}$ cycloalkyl), $-O(C_{6-10}$ aryl), $-O(C_{2-9}$ heteroaryl), $-S(C_{1-6}$ alkyl), $-S(O)(C_{1-6}$ alkyl), $-S(O)_2(C_{1-6}$ alkyl), $-S(C_{3-6}$ cycloalkyl), $-S(O)(C_{3-6}$ cycloalkyl), $-S(O)_2(C_{3-6}$ cycloalkyl), $-S(C_{6-10}$ aryl), $-S(O)(C_{6-10}$ aryl), $-S(O)_2(C_{6-10}$ aryl), $-S(C_{2-9}$ heteroaryl), $-S(O)(C_{2-9}$ heteroaryl) and $-S(O)_2(C_{2-9}$ heteroaryl); wherein each alkyl group is optionally substituted with 1 to 5 fluoro substitutents; and each aryl, cycloalkyl, heteroaryl and heterocyclic group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^k is independently selected from the group consisting of C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, cyano, halo, $-OR^f$, $-SR^f$, $-S(O)R^f$, $-S(O)_2R^f$ and $-NR^gR^h$; or two adjacent R^k groups are joined to form C_{3-6} alkylene, $-(C_{2-4}$ alkylene$)-O-$ or $-O-(C_{1-4}$ alkylene$)-O-$; wherein each alkyl, alkylene, alkenyl and alkynyl group is optionally substituted with 1 to 5 fluoro substitutents;

a is an integer from 2 to 7;

b is 0 or 1;

c is an integer from 2 to 7; provided that $a + b + c$ equals 7, 8 or 9;

m is an integer from 0 to 3;

n is an integer from 0 to 3;

p is 1 or 2;

q is an integer from 0 to 4;

r is an integer from 0 to 4;

x is an integer from 2 to 4;

y is an integer from 2 to 4;

or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

2. The compound according to Claim 1, wherein R^1 is selected from the group consisting of $-(CH_2)_7-$, $-(CH_2)_8-$, $-(CH_2)_9-$, $-(CH_2)_2-O-(CH_2)_4-$, $-(CH_2)_2-O-(CH_2)_5-$, $-(CH_2)_2-O-(CH_2)_6-$, $-(CH_2)_3-O-(CH_2)_3-$, $-(CH_2)_3-O-(CH_2)_4-$, $-(CH_2)_3-O-(CH_2)_5-$, $-(CH_2)_4-O-(CH_2)_2-$, $-(CH_2)_4-O-(CH_2)_3-$, $-(CH_2)_4-O-(CH_2)_4-$, $-(CH_2)_5-O-(CH_2)_2-$, $-(CH_2)_5-O-(CH_2)_3-$ and $-(CH_2)_6-O-(CH_2)_2-$.

3. The compound according to Claim 2, wherein R^1 is $-(CH_2)_7-$, $-(CH_2)_8-$, $-(CH_2)_9-$, $-(CH_2)_3-O-(CH_2)_3-$ or $-(CH_2)_4-O-(CH_2)_4-$.

4. The compound according to Claim 3, wherein R^1 is $-(CH_2)_7-$.

5. The compound according to Claim 1, wherein R^2 is C_{1-4} alkyl; wherein the alkyl group is optionally substituted with 1 to 3 fluoro substituents.

6. The compound according to Claim 5, wherein R^2 is selected from the group consisting of methyl, ethyl, *n*-propyl, isopropyl, *n*-butyl and isobutyl.

7. The compound according to Claim 1, wherein R^2 is $-CH_2-R^5$.

8. The compound according to Claim 7, wherein R^2 is selected from the group consisting of:

(a) $-CH_2-(C_{3-5}$ cycloalkyl); wherein the cycloalkyl group is optionally

substituted with 1 to 3 fluoro substituents;

(b) $-CH_2-$(phenyl), wherein the phenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

(c) $-CH_2-$(naphthyl); wherein the naphthyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

(d) $-CH_2-$(biphenyl), wherein each phenyl ring of the biphenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

(e) $-CH_2-$(pyridyl); wherein the pyridyl group is optionally substituted with 1 to 3 substituents independently selected from R^k; and

(f) $-CH_2C(O)-$(phenyl), wherein the phenyl ring of the phenacyl group is optionally substituted with 1 to 3 substituents independently selected from R^k.

9. The compound according to Claim 8, wherein R^2 is selected from the group consisting of cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl, benzyl, 4-cyanobenzyl, 4-methylbenzyl, 4-trifluoromethoxybenzyl, 4-difluoromethoxybenzyl, 4-thiomethoxybenzyl, 4-methanesulfonylbenzyl, 4-*tert*-butylbenzyl, 4-phenylbenzyl, pyridyl-2-ylmethyl, pyrid-3-ylmethyl, napthth-2-ylmethyl, 3-cyanophenacyl, and 3,4-ethylenedioxyphenacyl.

10. The compound according to Claim 1, wherein R^2 is $-(CH_2)_x-R^6$, wherein *x* is 2, 3 or 4.

11. The compound according to Claim 10, wherein R^2 is selected from the group consisting of:

(a) $-(CH_2)_x-OH$;

(b) $-(CH_2)_x-O(C_{1-4}$ alkyl); wherein the alkyl group is optionally substituted with 1 to 3 fluoro substituents;

(c) $-(CH_2)_x-S(C_{1-4}$ alkyl), $-(CH_2)_x-S(O)(C_{1-4}$ alkyl), or $-(CH_2)_x-S(O)_2(C_{1-4}$ alkyl); wherein the alkyl group is optionally substituted with 1 to 3 fluoro substituents;

(d) $-(CH_2)_x-$(phenyl), wherein the phenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

(e) $-(CH_2)_x-$(O-phenyl), wherein the phenyl group is optionally substituted

with 1 to 3 substituents independently selected from R^k;

(f) $-(CH_2)_x-$(naphthyl), wherein the naphthyl group is optionally substituted with 1 to 3 substituents independently selected from R^k; and

(g) $-(CH_2)_x-$(indolyl), wherein the indolyl group is optionally substituted with 1 to 3 substituents independently selected from R^k.

12. The compound according to Claim 11, wherein R^2 is selected from the group consisting of 2-hydroxyethyl, 2-methoxyethyl, 2-(methylthio)ethyl, 2-ethoxyethyl, 2-(ethylthio)ethyl, 2-(2,2,2-trifluoroethoxy)ethyl, 2-phenethyl, 2-(naphth-1-yl)ethyl, 2-(indol-3-yl)ethyl, 3-hydroxypropyl, 3-methoxypropyl, 3-ethoxypropyl, 3-phenylpropyl and 3-phenoxypropyl.

13. The compound according to Claim 1, wherein R^2 is ethyl, *n*-propyl, isopropyl, cyclopropylmethyl or 2-hydroxyethyl.

14. The compound according to Claim 1, wherein each R^3 is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, cyclopropylmethyl and 2-hydroxyethyl; wherein each alkyl group is optionally substituted with 1 to 5 fluoro substituents.

15. The compound according to Claim 14, wherein each R^3 is independently selected from the group consisting of hydrogen, methyl, ethyl, *n*-propyl, isopropyl, difluoromethyl, trifluoromethyl, 2,2,2-trifluoroethyl, 1,3-difluoroprop-2-yl, 1,1,3,-trifluoroprop-2-yl, and 1,1,3,3-tetrafluoroprop-2-yl.

16. The compound according to Claim 1, wherein R^4 is selected from the group consisting of C_{1-4} alkyl, $-OR^3$ and halo; wherein the alkyl group is optionally substituted with 1 to 5 fluoro substituents.

17. The compound according to Claim 16, wherein R^4 is methyl, $-OR^3$, fluoro or chloro.

18. The compound according to Claim 1, wherein *W*, *X*, *Y* and *Z* are defined as follows:

(a) *W* is N; *X* is CH; *Y* is CH; and *Z* is CH;

(b) *W* is CH or CR^4; *X* is N; *Y* is CH and *Z* is CH;

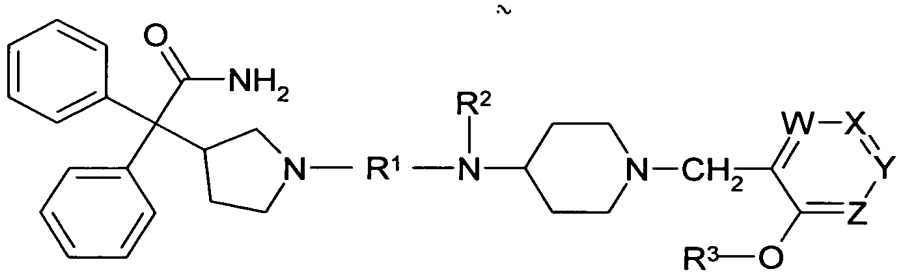
(c) *W* is CH or CR^4; *X* is CH; *Y* is N; and *Z* is CH;

(d) *W* is CH or CR^4; *X* is CH; *Y* is CH; and *Z* is N; or

(e) *W* is CH; *X* is N; *Y* is CH and *Z* is CH.

19. The compound according to Claim 18, wherein *W* is CH; *X* is N; *Y* is CH and *Z* is CH.

20. A compound of formula II:



II

wherein

W, *X*, *Y* and *Z* are independently selected from the group consisting of CH, CR^4, N and N→O; provided that at least one and no more than two of *W*, *X*, *Y* and *Z* are N or N→O;

R^1 is a group of formula (a):

$$-(CH_2)_a-(O)_b-(CH_2)_c- \qquad (a)$$

wherein each $-CH_2-$ group in formula (a) and the $-CH_2-$ group between the piperidine nitrogen atom and the ring containing *W*, *X*, *Y* and *Z* in formula II is optionally substituted with 1 or 2 substituents independently selected from the group consisting of C_{1-2} alkyl and fluoro; wherein each alkyl group is optionally substituted with 1 to 3 fluoro

substituents;

R^2 is selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^5$ and $-(CH_2)_x-R^6$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents;

each R^3 is independently selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^7$ and $-(CH_2)_y-R^8$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^4 is independently selected from the group consisting of C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-OR^3$ and halo; or two adjacent R^4 groups are joined to form C_{3-6} alkylene, $-O-(C_{2-4}$ alkylene$)-$, $-O-(C_{1-4}$ alkylene$)-O-$, $-(O)C-CH=CH-$ or $-CH=CH-C(O)-$; or when Z is CR^4, $-OR^3$ and R^4 are joined to form $-O-(C_{2-5}$ alkylene$)-$ or $-O-(C_{1-5}$ alkylene$)-O-$; wherein each alkyl, alkylene, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^5 and R^7 is independently selected from the group consisting of C_{3-5} cycloalkyl, C_{6-10} aryl, $-C(O)(C_{6-10}$ aryl), C_{2-9} heteroaryl, $-C(O)(C_{2-9}$ heteroaryl) and C_{3-6} heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k and the aryl and heteroaryl groups are optionally further substituted with a phenyl group, where the phenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^6 and R^8 is independently selected from the group consisting of $-OH$, $-OR^9$, $-SR^9$, $-S(O)R^9$, $-S(O)_2R^9$, $-C(O)R^9$, C_{3-5} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl and C_{3-6} heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^9 is independently selected from the group consisting of C_{1-4} alkyl, C_{3-5} cycloalkyl, C_{6-10} aryl and C_{2-9} heteroaryl; wherein the alkyl and cycloalkyl groups are optionally substituted with 1 to 5 fluoro substituents; and the aryl and heteroaryl groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^f is independently selected from the group consisting hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; wherein each alkyl, alkenyl, alkynyl and

cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^g and R^h is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; or R^g and R^h are joined together with the nitrogen atom to which they are attached to form C_{3-6} heterocyclic; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents, and the heterocyclic group is optionally substituted with 1 to 3 substitutents independently selected from C_{1-4} alkyl and fluoro;

each R^k is independently selected from the group consisting of C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, cyano, halo, $-OR^f$, $-SR^f$, $-S(O)R^f$, $-S(O)_2R^f$ and $-NR^gR^h$; or two adjacent R^k groups are joined to form C_{3-6} alkylene, $-(C_{2-4}$ alkylene$)-O-$ or $-O-(C_{1-4}$ alkylene$)-O-$; wherein each alkyl, alkylene, alkenyl and alkynyl group is optionally substituted with 1 to 5 fluoro substitutents;

a is an integer from 2 to 7;

b is 0 or 1;

c is an integer from 2 to 7; provided that $a + b + c$ equals 7, 8 or 9;

x is an integer from 2 to 4;

y is an integer from 2 to 4;

or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

21. The compound according to Claim 20, wherein R^1 is $-(CH_2)_7-$, $-(CH_2)_8-$, $-(CH_2)_9-$, $-(CH_2)_3-O-(CH_2)_3-$ or $-(CH_2)_4-O-(CH_2)_4-$.

22. The compound according to Claim 21, wherein R^2 is C_{1-4} alkyl; wherein the alkyl group is optionally substituted with 1 to 3 fluoro substituents.

23. The compound according to Claim 22, wherein each R^3 is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, cyclopropylmethyl and 2-hydroxyethyl; wherein each alkyl group is optionally substituted with 1 to 5 fluoro substituents.

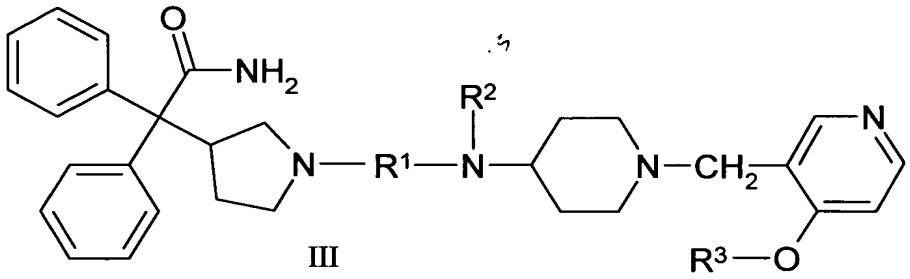
24. The compound according to Claim 23, wherein

R^1 is $-(CH_2)_7-$;

R^2 is selected from the group consisting of methyl, ethyl, *n*-propyl, isopropyl, *n*-butyl and isobutyl; and

each R^3 is independently selected from the group consisting of hydrogen, methyl, ethyl, *n*-propyl, isopropyl, difluoromethyl, trifluoromethyl, 2,2,2-trifluoroethyl, 1,3-difluoroprop-2-yl, 1,1,3,-trifluoroprop-2-yl, and 1,1,3,3-tetrafluoroprop-2-yl.

25. A compound of formula III:



III

wherein

R^1 is a group of formula (a):

$$—(CH_2)_a—(O)_b—(CH_2)_c— \qquad (a)$$

wherein each $-CH_2-$ group in formula (a) and the $-CH_2-$ group between the piperidine nitrogen atom and the pyridine ring in formula III is optionally substituted with 1 or 2 substituents independently selected from the group consisting of C_{1-2} alkyl and fluoro; wherein each alkyl group is optionally substituted with 1 to 3 fluoro substituents;

R^2 is selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^5$ and $-(CH_2)_x-R^6$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents;

each R^3 is independently selected from the group consisting of hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl, $-CH_2-R^7$ and $-(CH_2)_y-R^8$; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^5 and R^7 is independently selected from the group consisting of C_{3-5} cycloalkyl, C_{6-10} aryl, $-C(O)(C_{6-10}$ aryl), C_{2-9} heteroaryl, $-C(O)(C_{2-9}$ heteroaryl) and C_{3-6}

heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k and the aryl and heteroaryl groups are optionally further substituted with a phenyl group, where the phenyl group is optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^6 and R^8 is independently selected from the group consisting of -OH, $-OR^9$, $-SR^9$, $-S(O)R^9$, $-S(O)_2R^9$, $-C(O)R^9$, C_{3-5} cycloalkyl, C_{6-10} aryl, C_{2-9} heteroaryl and C_{3-6} heterocyclic; wherein the cycloalkyl group is optionally substituted with 1 to 5 fluoro substituents; and the aryl, heteroaryl and heterocyclic groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^9 is independently selected from the group consisting of C_{1-4} alkyl, C_{3-5} cycloalkyl, C_{6-10} aryl and C_{2-9} heteroaryl; wherein the alkyl and cycloalkyl groups are optionally substituted with 1 to 5 fluoro substituents; and the aryl and heteroaryl groups are optionally substituted with 1 to 3 substituents independently selected from R^k;

each R^f is independently selected from the group consisting hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents;

each R^g and R^h is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl and C_{3-6} cycloalkyl; or R^g and R^h are joined together with the nitrogen atom to which they are attached to form C_{3-6} heterocyclic; wherein each alkyl, alkenyl, alkynyl and cycloalkyl group is optionally substituted with 1 to 5 fluoro substitutents, and the heterocyclic group is optionally substituted with 1 to 3 substitutents independently selected from C_{1-4} alkyl and fluoro;

each R^k is independently selected from the group consisting of C_{1-4} alkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, cyano, halo, $-OR^f$, $-SR^f$, $-S(O)R^f$, $-S(O)_2R^f$ and $-NR^gR^h$; or two adjacent R^k groups are joined to form C_{3-6} alkylene, $-(C_{2-4}$ alkylene$)-O-$ or $-O-(C_{1-4}$ alkylene$)-O-$; wherein each alkyl, alkylene, alkenyl and alkynyl group is optionally substituted with 1 to 5 fluoro substitutents;

a is an integer from 2 to 7;

b is 0 or 1;

c is an integer from 2 to 7; provided that $a + b + c$ equals 7, 8 or 9;

x is an integer from 2 to 4;

y is an integer from 2 to 4;

or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

26. The compound according to Claim 25, wherein R^1 is $-(CH_2)_7-$, $-(CH_2)_8-$, $-(CH_2)_9-$, $-(CH_2)_3-O-(CH_2)_3-$ or $-(CH_2)_4-O-(CH_2)_4-$.

27. The compound according to Claim 26, wherein R^2 is C_{1-4} alkyl; wherein the alkyl group is optionally substituted with 1 to 3 fluoro substituents.

28. The compound according to Claim 27, wherein each R^3 is independently selected from the group consisting of hydrogen, C_{1-4} alkyl, cyclopropylmethyl and 2-hydroxyethyl; wherein each alkyl group is optionally substituted with 1 to 5 fluoro substituents.

29. The compound according to Claim 28, wherein

R^1 is $-(CH_2)_7-$;

R^2 is selected from the group consisting of methyl, ethyl, *n*-propyl, isopropyl, *n*-butyl and isobutyl; and

R^3 is selected from the group consisting of hydrogen, methyl, ethyl, *n*-propyl, isopropyl, difluoromethyl, trifluoromethyl, 2,2,2-trifluoroethyl, 1,3-difluoroprop-2-yl, 1,1,3,-trifluoroprop-2-yl, and 1,1,3,3-tetrafluoroprop-2-yl.

30. A compound selected from the group consisting of:

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahept-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(ethyl)amino}-1-(2-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(ethyl)amino}-1-(3-methoxypyrid-2-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahept-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxaoct-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxanon-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxaoct-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxanon-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxahept-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxaoct-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxanon-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxaoct-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxanon-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-7-oxanon-1-yl]-*N*-(ethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxaoct-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxanon-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahep-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxaoct-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxanon-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxahept-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxaoct-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxanon-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxaoct-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxanon-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-7-oxanon-1-yl]-*N*-(prop-1-yl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-*n*-propoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-isopropoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-cyclopropyl-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-{4-(2-hydroxyethoxy)pyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-isobutoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2,4-dimethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-fluoro-4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-chloro-4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-methyl-4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-2-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-2-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-2-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-4-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-4-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(isopropyl)amino}-1-(3-methoxypyrid-4-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(isopropyl)amino}-1-(2-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(isopropyl)amino}-1-(2-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxaoct-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxanon-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahep-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxanon-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxaoct-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxanon-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxaoct-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxanon-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-7-oxanon-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxaoct-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxanon-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahep-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxaoct-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxanon-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxahept-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxaoct-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxanon-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxaoct-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxanon-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-7-oxanon-1-yl]-*N*-(cyclopropylmethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)oct-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)non-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxahept-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxaoct-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-3-oxanon-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxahep-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxaoct-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-4-oxanon-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxahept-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxaoct-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-5-oxanon-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[8-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxaoct-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-6-oxanon-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[9-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)-7-oxanon-1-yl]-*N*-(2-hydroxyethyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-*tert*-butoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-hydroxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-ethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-trifluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-difluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxy-2-trifluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-difluoromethoxy-4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-methoxy-4-trifluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-difluoromethoxy-2-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-{2,4-di(trifluoromethoxy)pyrid-3-ylmethyl}piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-{2,4-di(difluoromethoxy)pyrid-3-ylmethyl}piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-ethoxy-4-trifluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2-ethoxy-4-difluoromethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(2,4-diethoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-(*N*-methylcarbamoyl)-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-(*N*,*N*-dimethylcarbamoyl)-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-hydroxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-(*N*,*N*-diethylcarbamoyl)-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-hydroxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-(piperidin-1-ylcarbonyl)-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-hydroxypyrid-3-ylmethyl)piperidine;

4-{*N*-[7-(3-(*S*)-1-(morpholin-4-ylcarbonyl)-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-hydroxypyrid-3-ylmethyl)piperidine; and

4-{*N*-[7-(3-(*S*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-[4-(2-fluoroethoxy)pyrid-3-ylmethyl]piperidine;

4-{*N*-[7-(3-(*R*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine; and

4-{*N*-[7-(3-(*R*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hep-1-yl]-*N*-(isopropyl)amino}-1-(4-ethoxypyrid-3-ylmethyl)piperidine;

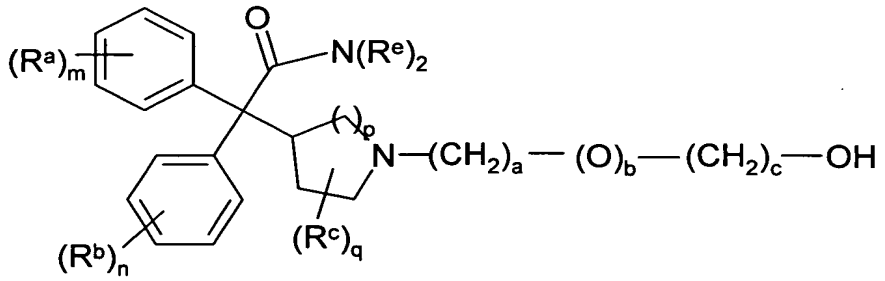
or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

31. 4-{*N*-[7-(3-(*S*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(isopropyl)amino}-1-(4-methoxypyrid-3-ylmethyl)piperidine; or a pharmaceutically-acceptable salt or solvate thereof.

32. 4-{*N*-[7-(3-(*S*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(isopropyl)amino}-1-(4-ethoxypyrid-3-ylmethyl)piperidine; or a pharmaceutically-acceptable salt or solvate thereof.

33. 4-{*N*-[7-(3-(*S*)-1-Carbamoyl-1,1-diphenylmethyl)pyrrolidin-1-yl)hept-1-yl]-*N*-(isopropyl)amino}-1-(4-isopropoxypyrid-3-ylmethyl)piperidine; or a pharmaceutically-acceptable salt or solvate thereof.

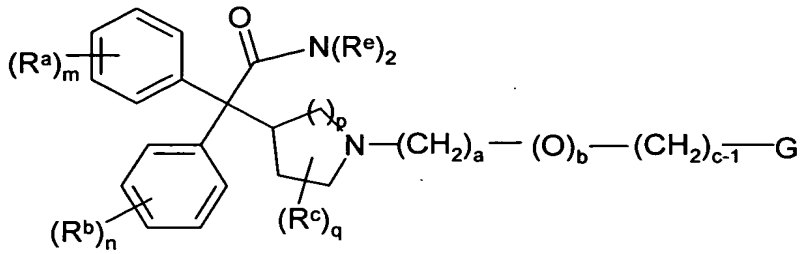
34. A compound of formula IV:



IV

wherein R^a, R^b, R^c, R^e, *a*, *b*, *c*, *m*, *n*, *p* and *q* are as defined in Claim 1, or a salt or stereoisomer or protected derivative thereof;

35. A compound of formula V:



V

wherein R^a, R^b, R^c, R^e, *a*, *b*, *c*, *m*, *n*, *p* and *q* are as defined in Claim 1, and *G* is selected from the group consisting of:

-CHO;

-$CH(OR^m)$, where R^m is C_{1-6} alkyl, or both R^m groups are joined to form C_{2-6} alkylene;

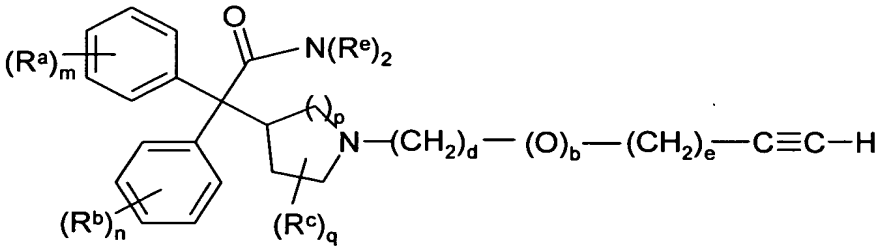
-COOH; and

-$CH{=}CH_2$;

-CH_2-L, where L is a leaving group;

or a salt or stereoisomer or protected derivative thereof;

36. A compound of formula VI:



VI

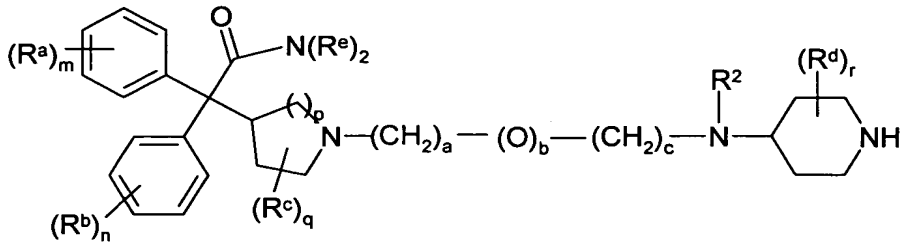
wherein R^a, R^b, R^c, R^e, *b*, *m*, *n*, *p* and *q* are as defined in Claim 1;

d is an integer from 2 to 5;

e is an integer from 1 to 4, provided that $d + b + e + 3$ equals 7, 8 or 9;

or a salt or stereoisomer or protected derivative thereof.

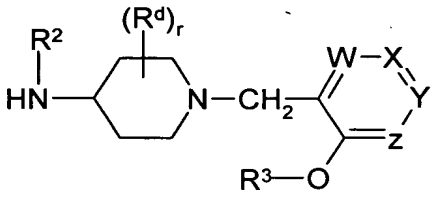
37. A compound of formula VII:



VII

wherein R^2, R^a, R^b, R^c, R^d, R^e, *a*, *b*, *c*, *m*, *n*, *p*, *q* and *r* are as defined in Claim 1; or a salt or stereoisomer or protected derivative thereof.

38. A compound of formula VIII:



VIII

wherein R^2, R^3, R^d, *r*, *W*, *X*, *Y* and *Z* are as defined in Claim 1; or a salt or stereoisomer or protected derivative thereof.

39. A pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a therapeutically effective amount of a compound of any one of Claims 1 to 33.

40. A method for treating a mammal having a medical condition alleviated by treatment with a muscarinic receptor antagonist, the method comprising administering to the mammal a therapeutically effective amount of a pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a compound of Claim 1.

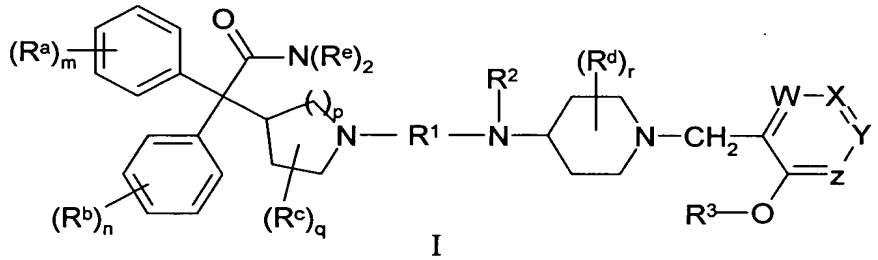
41. The method according to Claim 40, wherein the medical condition is

overactive bladder.

42. A method of antagonizing a muscarinic receptor in a biological system or sample, the method comprising contacting a biological system or sample comprising a muscarinic receptor with a muscarinic receptor-antagonizing amount of a compound of Claim 1.

43. A method of treating overactive bladder in a patient, the method comprising administering to the patient a therapeutically effective amount of a pharmaceutical composition comprising a pharmaceutically-acceptable carrier and a compound of any one of Claims 1, 20, 25, 30, 31, 32 or 33.

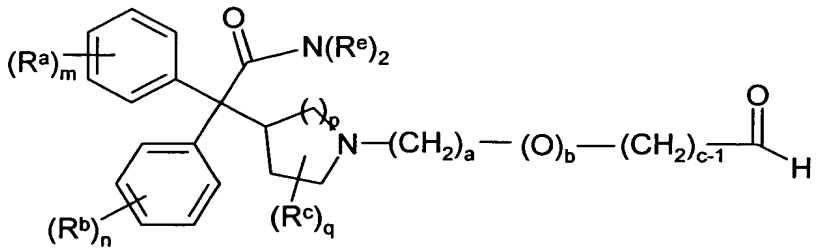
44. A process for preparing a compound of formula I:



I

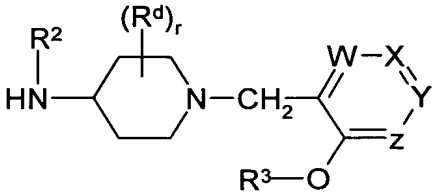
wherein R^1, R^2, R^3, R^a, R^b, R^c, R^d, m, n, p, q, r, W, X, Y and Z are as defined in Claim 1; or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof;

the process comprising reacting a compound of formula Va:



Va

or a salt or stereoisomer or protected derivative thereof; with a compound of formula VIII:



VIII

or a salt or protected derivative thereof; and a reducing agent to provide a compound of formula I, or a pharmaceutically-acceptable salt or solvate or stereoisomer thereof.

45. The process of Claim 44, wherein the process further comprises the step of forming a pharmaceutically-acceptable salt of the compound of formula I.

46. The product prepared by the process of Claims 44 or 45.